

**AMENDMENT TO
EXECUTIVE COMPLIANCE AGREEMENT**

**DEPARTMENT OF CORRECTIONS
COFFEEWOOD CORRECTIONAL CENTER**

**For
COFFEEWOOD WATER & SEWAGE TREATMENT PLANT
(VPDES Permit No. VA0087718)**

This is an amendment to the Executive Compliance Agreement ("Agreement") entered into under the authority of Va. Code § 62.1-14 and 10.1-1185 by the Department of Environmental Quality ("DEQ") and the Department of Corrections, ("DOC") Coffeewood Correctional Center ("Coffeewood") on February 2, 2001, regarding the Coffeewood water treatment and sewage treatment plant for the purpose of revising certain provisions of the Agreement.

The Agreement provides a construction schedule for Coffeewood to combine discharges from water treatment outfall 002 and sewage treatment outfall 001 into one outfall and to locate that outfall on the Rapidan River where the River's flow provides sufficient dilution for the discharge to meet the Permit's whole effluent toxicity limit ("WET") and effluent limits for copper and zinc. The construction schedule requires that Coffeewood complete construction of the new outfall by August 31, 2002 but completion is contingent upon Coffeewood acquiring the necessary easements to gain access to the Rapidan River.

In a letter dated October 15, 2001, Coffeewood explained that the DOC is unable to acquire the necessary easements. In follow-up correspondence dated March 22, 2002, Coffeewood requested that the Agreement be amended to extend the construction schedule so that Coffeewood could develop and implement an alternative plan and schedule for achieving compliance with final Permit effluent limits.

To remedy these matters, the Department of Corrections, Coffeewood Correctional

DOC Coffeewood Correctional Center
Amended Executive Compliance Agreement
Page 2

Center and DEQ agree to the amended schedule of action in Appendix A and to Coffeewood's compliance with the interim limits provided in Appendices B and C. Both DEQ and Coffeewood understand and agree that this amended Agreement does not alter, modify, or amend any other provisions of the Agreement and the unmodified provisions of the Agreement remain in effect by their own terms.

This amended Agreement shall become effective upon the date of its execution by the Director of the Department of Environmental Quality or his designee. The Department of Corrections, Coffeewood Correctional Center agrees to be bound by any compliance dates in this amended Agreement which may predate its effective date.

Ron Angelone, Director
Department of Corrections

Date

Robert G. Burnley, Director
Department of Environmental Quality

Date

APPENDIX A
SCHEDULE OF COMPLIANCE

The Department of Corrections, Coffeewood Correctional Center shall:

1. By July 1, 2002, submit for review a preliminary engineering report ("PER") to the DEQ Northern Virginia Regional Office ("NVRO") and to the Virginia Department of Health ("VDH") addressing alternatives for achieving compliance with final Permit effluent limits and recommending a preferred alternative; and
2. By November 1, 2002, submit to DEQ NVRO for review and approval a plan and schedule for implementing the alternative chosen by Coffeewood for achieving compliance with final Permit effluent limits. If the cost of the alternative chosen by Coffeewood exceeds the amount budgeted for the project, the schedule submitted pursuant to item two may provide for time needed to request additional funding from the Virginia General Assembly. Upon approval, the plan and schedule shall become a part of and enforceable under this Agreement.

CONFIDENTIAL

ENFORCEMENT RECOMMENDATION & PLAN (ERP)

REGION: NVRO

DATE: December 5, 2000

FACILITY / OWNER: Coffeewood Correctional Center WTP
Department of Corrections
Coffeewood Correctional Center

LOCATION: Culpeper, Virginia

PERMIT / REGISTRATION NO. (if applicable): VA0087718

MEDIUM: Water

SIGNIFICANT VIOLATOR: X yes ___ no

STATE WATERS AFFECTED (if applicable): Cabin Branch, a tributary of the Rapidan River in the Rappahannock River Basin

VIOLATIONS:

Citation(s)	Description
9 VAC 25-31-50.A 9 VAC 25-31-190 A	Effluent violations of whole effluent toxicity ("WET") limit..

CASE SUMMARY: Coffeewood Correctional Center ("Coffeewood") is a State-owned medium security prison serving approximately 1,100 inmates located in Culpeper, Virginia. Coffeewood owns and operates the Coffeewood water treatment plant ("WTP"). The WTP is subject to VPDES Permit No. VA0087718 ("Permit") which was reissued on August 6, 1998, and expires on August 6, 2003. The WTP is categorized as a major industrial facility and discharges wastewater to Cabin Branch, a tributary of the Rapidan River in the Rappahannock River Basin.

The WTP discharges from outfall 002, and results from the operation of a 0.070 MGD reverse osmosis

DOC Coffeewood Correctional Center
Amended Executive Compliance Agreement
Page 5

potable water treatment system. In May 1995, the Permit required that Coffeewood implement a Toxicity Monitoring Program ("TMP"). The TMP consisted of quarterly acute and chronic tests for the period of one year. According to the TMP data summarized in 1996, effluent from outfall 002 consistently exhibited toxicity and failed to pass the effluent toxicity decision criterion specified in the Permit. As a result, it was necessary for Coffeewood to perform a Toxicity Reduction Evaluation ("TRE") to improve effluent quality by removing or reducing toxicity.

TRE data indicated that the toxicity from outfall 002 was caused by high concentration of total dissolved solids that consisted mainly of calcium sulfate commonly found in gypsum. The data also indicated that the toxicity could be reduced by dilution. The TRE outlined steps to be taken to meet the whole effluent toxicity ("WET") limit, which became effective in November 1999. In addition, the TRE included a proposal for an expansion of the Coffeewood sewage treatment plant ("STP") and elimination of outfall 002 by connecting the discharge from the WTP to the STP's outfall 001. The plan was to be accomplished in two phases and incorporated a three-year schedule to achieve compliance with the WET limit before its effective date. Coffeewood has not achieved compliance with the WET limit.

Coffeewood now proposes to combine discharges from outfall 001 and 002 into one outfall and to locate that outfall on the Rapidan River where the River's flow would provide sufficient dilution for the discharge to meet the Permit WET limit.

DEQ NVRO issued Coffeewood Notices of Violation in June and September 2000 for exceedances of the WET limits at outfall 002 in March and June 2000. The Coffeewood STP also exceeded the Permit limit for TKN in June 2000 because of a defective activated sludge sequential batch reactor ("SBR"). The SBR has been repaired and the problem should not reoccur.

RESOURCE DAMAGES AND/OR POTENTIAL FOR HARM: The potential for harm is serious because the STP's failure to comply with the WET limit has a negative impact on the receiving stream's aquatic life.

EFFECT ON REGULATORY PROGRAM (if applicable): The effect on the regulatory program is serious because Coffeewood Correctional Center has not complied with the Permit and the integrity of the program depends on voluntary compliance of the regulatory community.

PREFERRED ACTION: Enter into a Executive Compliance Agreement with a schedule of compliance that requires Coffeewood to construct a force main and outfall that will discharge to the Rapidan River replacing existing outfalls 001 and 002 and achieve compliance with WET limits by September 30, 2002.

RECOMMENDED CIVIL CHARGE: N/A

RECOMMENDED BY: Douglas E. Washington

DOC Coffeewood Correctional Center
Amended Executive Compliance Agreement
Page 6

REVIEWED BY CENTRAL OFFICE: Kathleen F. O'Connell / Water Enforcement Program Manager

CONCURRENCE (initial and date):

Compliance/Enforcement Manager

Date

Regional Director

Date

COMMENTS:

cc: OEC, Central Office

